

MEL'NIKOVA, T. G.

"Ixodes Ticks of the Crimean National Forest." Cand Biol Sci, Inst of Zoology,
Acad Sci USSR, Leningrad, 1953. (EzhBiol, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

Mel'nikova, T. I.

Xiv/Im 13

Tick/Biology - Ixodidae Ticks

"Ixodidae Ticks on Wild and Domestic Animals in the Irkutsk State Reservation," T. I.

Mel'nikova, Irkutsk State Forest Reservation

Zool Zhur, Vol 32, No 3, pp 432-434

Sixteen species of Ixodidae ticks have been found on the wild and domestic animals and birds in the wooded area of the Irkutsk State Reservations. Most numerous are Ixodes ricinus and Haemaphysalis concinna. These ticks attack humans as well as animals. An average of 313 ticks has been found on a Cervus elaphus transsylvanicus (Marsk.) and 5 on a Lepus europaeus transsylvanicus M. Ixodes ricinus reach the maximum density in Mar, Apr, May, Sep, Oct, Nov, and sometimes Dec. Other species of ticks are also listed.

Xiv T7

MEL'NIKOVA, T. G.

Dissertation: "Ixodic Ticks of the Crimean National Park." Cand Biol Sci, Inst
of Zoology, Acad Sci USSR, Jan-Mar 54. (Vestnik Akademii Nauk, Moscow, Aug 54)

SO: SUM 393, 28 Feb 1955

MEL'NIKOVA, T.G.

USSR/Zooparasitology - Tics and Insects (Disease Transmitters) P-3

Abs Jour : Referat Zhur - Biologii, No 16, 1957, 70179

Author : Mel'nikova, T.G.

Title : The Developmental Cycle of Hyalomma Scupense F.Sch. in Natural Surroundings of the Krymsk Preserves.

Orig Pub : Izv. Gtd. Yestestv. Nauk AN Tadzh, 1956, 15, 121-126

Abstract : Most favorable conditions for laying of eggs of H. scupense determined and their subsequent development in the Krymsk Preserve, and also the duration of the development on the host and outside same.

Chair Zoology, Tadzhik State U

Card 1/1

- 28 -

USSR / Zooparasitology. Acarina and Insects. Vectors G
of Pathogenic Agents. Acarina.

Abs Jour: Ref Zhur-Biol., No 6, 1959, 24287.

Author : Mel'nikova, T. G.

Inst : Not given.

Title : On the Development of the Tick Haemaphysalis concina Koch. under Natural Conditions of the Crimean Reservation.

Orig Pub: Zool. zh., 1958, 37, No 2, 297-300.

Abstract: The duration of feeding depends on the type of the host and on the season. In the spring, the females become satiated faster than in the fall and faster on deer than on the rabbit. Larvae become satiated faster on the rabbit than on deer. The amount of eggs is 1,600-2,000. The develop-

Card 1/2

MEL'NIKOVA, T.G.

Materials on the ecology of the louse *Haematopinus suis* L. parasitic
on the Central Asian wild bear. Zool.zhur. 39 no.6:866-872 Je
'60. (MIRA 13:7)

1. Tadzik State University, Stalinabad.
(Tajikistan--Lice)
(Parasites--Wild boar)

MEL'NIKOVA, T.G.

Development and distribution of the tick *Dermacentor marginatus*
Sulz in mountain-forest regions of the Crimea. Zool. zhur. 40
no.6:826-832 Je '61. (MIRA 14:6)

1. State Preserve of the Crimea.
(Crimea--Ticks)

OLSUF'YEV, N.G.; MEL'NIKOVA, T.G.

Horseflies (Diptera, Tabanidae) of the Crimea. Ent. obozr. 41
no.3:576-578 '62. (MIRA 15:10)

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamaleya
AMN SSSR, Moskva i Krymskiy gosudarstvennyy zapovednik.
(Crimea—Horseflies)

MEDNIKOVA, T.N.

Horseflies (Tabanidae) of Afghanistan. Sov. Zool. Zh. 12-
1034 1965. (USSR, P. 1)

1. Kafedra zoologii Leningradskogo gosudarstvennogo universiteta.
cheskogo instituta.

MEL'NIKOVA, T.I.; SOROKIN, F.S.

Illuminate progressive practices with knowledge of the work ("Work organisation of the main brigade operating printing machines in the cotton industry" V.I. Maleev, V.A. Davidovich. Reviewed by T.I. Mel'nikova, F.S. Sorokin. Tekst.prom. 16 no.6:68 Je '56.(MLRA 9:8)

1. Nachal'mik pechatnogo tsekha fabriki imeni rabochego G.I. Zinov'yeva (for Mel'nikova); 2. Master pechatnogo tsekha fabriki imeni rabochego F.I. Zinov'yeva (for Sorokin).
- (Textile printing) (Maleev, V.I.) (Davidovich, V.A.)

KUDRYAVTSEV, A.A.; SELIVANOVA, N.M.; DRAKIN, S.I., dots.; MAYYER, A.I.; SAMPLAVSKAYA, K.K.; SOLOKHIN, V.A.; STAKHANOVA, M.S.; BUNDEL', A.A., prof., *retsensent*; KARAPET'YANTS, M.Kh., doktor khim. nauk, prof., red.; MEL'NIKOVA, T.I., red.

[Laboratory work in general and inorganic chemistry] Praktikum po obshchei i neorganicheskoi khimii. [By] A.A.Kudriavtsev i dr. Moskva, Mosk. khimiko-tekhrol. in-t im. D.I.Mendeleeva. Pt.2. [Work in the chemistry of elements] Raboty po khimii elementov. 1963. 122 p. (MIRA 16:10)

(Chemistry--Laboratory manuals)
(Chemical elements)

MEL'NIKOVA, T.I.

The use of effective forms of exchanging information on advanced practices in the Ivanovo Economic Council. Opyt rab. po tekhn. inform. i prop. no.1:11-13 '63. (MIRA 16:12)

1. Nachal'nik otdela Tsentral'nogo byuro tekhnicheskoy informatsii Ivanovskogo soveta narodnogo khozyaystva.

MEL'NIKOVA, T.I.

Organizing competition for the honor of best enterprise
providing technological information and propaganda. Opyt.
rab. po tekhn. inform. i prop. no.3:22-23 '63. (MIRA 16:12)

MEL'NIKOVA, T.N.

Mathematical basis of Russian maps of the 18th century. Geog.

sbor. no.3:117-130 '54.

(MLBA 7:11)

(Geography, Mathematical)

MEL'NIKOVA, T.N.

Surveying of forests as a source for the mapping of the Voronezh
Government in 1745. Trudy VGU 42 no.4:71-72 '55. (MIRA 11:6)
(Voronezh Government--Maps)

3(2)

PHASE I BOOK EXPLOITATION

SOV/1738

Mel'nikova, Tat'yana Nikolayevna

Bibliotekhnaya obrabotka geograficheskikh kart; opredeleniye chislennykh masshtabov (Library Processing of Geographical Maps; Determination of Numerical Scales) Moscow, Izd-vo AN SSSR, 1958. 82 p. illus., biblio. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Biblioteka.

Resp. Ed.: A.P. Yushchenko, Professor; Tech. Ed.: A .V. Smirnova

PURPOSE: This booklet is intended for library workers who handle maps and others who have need to determine map scales.

COVERAGE: This booklet contains practical information on the basic types of map projections with illustrations. It also gives several methods for determining map scale plus useful tabular aids. The most useful of the tables is the

Card 1/4

Library Processing of Geographical Maps (Cont.) SOV/1738

one which lists the units of measure, past and present, of various countries. This booklet was prepared in cooperation with the Sektor kartografii BAN. The author thanks T.A. Stanchyl for his help in compiling the work. There are 60 bibliographic references of which 38 are Soviet, 17 English, 3 German, and 2 French. There are 26 map references of which 6 are Soviet and the remainder non-Soviet.

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Library Processing of Geographical Maps (Cont.) SNV/1738

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MS/LST
5-26-59

Card 4/4

MEL'NIKOVA, T.N.; STANCHUL, T.A.; LUPPOV, S.P., red.; BOCHEVER, V.T.,
tekh.n.red.

[Catalog of foreign geographical maps published from 1940 through 1958] Katalog inostrannykh geograficheskikh kart, izdannykh v 1940-1958 gg. Sost. T.N.Mel'nikova i T.A.Stanchul. Pod red. S.P.Luppova. Moskva, 1960. 209 p.

(MIRA 14:2)

1. Akademiya nauk SSSR. Biblioteka. Otdel kartografii.
(Maps--Catalogs)

MEL'NIKOVA, T.N.; STANCHUL, T.A. Prinimali uchastiye GORYUROVA, Z.P.
PROKHOROVA, D.S.; RAFES, I.F.; UTEKHINSKAYA, K.I.; LUPPOV,
S.P., red.

[Catalog of foreign geographical atlases of the Library of
the Academy of Sciences of the U.S.S.R. published in 1940-
1963] Katalog inostrannykh geograficheskikh atlasov Biblio-
teki AN SSSR, izdannykh v 1940-1963 gg. Moskva, Nauka,
1965. 164 p. (MIRA 18:3)

1. Akademiya nauk SSSR. Biblioteka. 2. Otdel kartografii
Biblioteki AN SSSR (for all except Luppov).

L 22904-66 EWT(1)/EPF(n)-2/T/ETC(m)-6 IJP(c) WW

ACC NR: AP6006868

SOURCE CODE: UR/0181/66/008/002/0606/0608

AUTHOR: Zaytsev, V. M.; Mel'nikova, T. N.

73
B

ORG: Perm' State University im. A. M. Gor'kiy (Permskiy gosudarstvennyy universitet)

21, 44, 55

21, 44, 55

TITLE: Concerning the interaction of a polaron with acoustic oscillations

SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 606-608

TOPIC TAGS: polaron, phonon interaction, temperature dependence, cyclotron resonance, crystal lattice vibration, energy band structure, carrier density

ABSTRACT: In view of the lack of reliable methods for estimating the interaction between a slow electron and acoustical phonons, the authors propose to use for this purpose the temperature dependence of the effective mass of the polaron, which can be determined from experiments on cyclotron resonance. Whereas at zero temperature the addition to the mass is due to the interaction between the electron and the zero-point lattice vibrations, at nonzero temperatures a noticeable contribution is made by the really existing phonons. This leads to a dependence of the energy spectrum and of the effective mass of the polaron on the temperature. The expressions for these dependences are obtained from the Hamiltonian of the

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Card 1/2

L 22904-66

ACC NR: AF6006868

electron-phonon interaction, written in the second-quantization representation. The equations show that interaction with the acoustic phonons leads to a temperature dependence of the effective mass which in principle can be determined from measurements of the cyclotron resonance, if the dimensionless coupling constant is not too small. The measurements are best carried out at low carrier densities. Orig. art. has: 2 formulas.

SUB CODE: 20/ SUBM DATE: 20Jul65/ ORIG REF: 004

Card 2/2 B19

MEL'NIKOVA, Taisiya Stepanovna, kand.ekonom.nauk; RAYEVSKIY, L.A., red.;
RAKHMATULLIN, F., tekhnred.

[Formation of a labor force in Uzbekistan] Formirovaniye pro-
myshlennykh kadrov v Uzbekistane. Tashkent, Gos.izd-vo UzSSR,
1956. 110 p. (13:2)

(Uzbekistan--Industries)
(Uzbekistan--Labor and laboring classes)

VASIL'YEVA, V.M.; MEL'NIKOVA, T.S.

Effect of proprioceptive impulsion on the electrical activity of the cerebral cortex in rabbits. Nauch. dokl. vys. shkoly; biol. nauki no. 2:72-75 '64 (MIRA 17:2)

1. Rekomendovana katedr y fiziologii vysshey nervnyy regulyatsii Moskovskogo gosudarstvennogo universiteta.

PROCESSES AND PROPERTIES INDEX																									
1ST AND 2ND ORDERS													3RD AND 4TH ORDERS												
<p>Influence of various forms of nitrogen and phosphorus-potassium fertilizers on hemp yields. T. S. Melnikova and T. D. Kozitskaya. <i>Trans. Sci. Inst. Fertilizers Insectofungicides</i> (U. S. S. R.) No. 130, 70-82 (1937); <i>Chemie & Industrie</i> 42, 781. - Systematic application of NH_4Cl as sole mineral fertilizer leads to a modification of the properties of the soil governing the increase in sensitivity of plants toward Cl; the Ca absorption decreases, and the pH and exchangeable and hydrolytic acidity increase. The resultant harmful influence is therefore not due to accumulation of chlorides in the soil (Cl is eliminated by fixation), but to a modification of the "physiol. buffer power" of the soil. Use of NH_4Cl for the cultivation of hemp in a podzolized soil is not advisable, nor is the systematic use of $(\text{NH}_4)_2\text{SO}_4$. The best fertilizers are Ca cyanamide and KNO_3. A. P.-C.</p>																									
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									

Experiments with chlorides and sulfates added to heavy soils. T. S. Melnikova. *Tran. So. Inst. Fertilizers*. Insectofungicides (U.S.S.R.) No. 148, 143-142 (1941). - NH_4Cl and $(\text{NH}_4)_2\text{SO}_4$ proved to be injurious to hemp from the very first season of their use. Flax began to show injury after the third year. The native potash salts contg. Cl have also been injurious. For flax, Na_2SO_4 proved to be the best source of N. I. S. Iul'f.

MEL'NIKOVA, T. S.

"An Evaluation of the Nutrient Content of Bovine Rations Consisting of Grains, Silage, and Hay." Cand Agr Sci, Moscow Veterinary Acad, Moscow, 1954. (RZhEiol, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (1954-55)
SU: Sum. No 598, 29 Jul 55

MEL'NIKOVA, T.S.

USSR

The effect of fertilizers on the botanical content of perennial grasses. L. S. Kaplanova and T. S. Melnikova. *Vestnik Moskov. Univ.* 9, No. 9, Ser. Fiz.-Mat. i Estestv. Nauk No. 6, 119-27(1954).—The effects of various fertilizers on the growth of a mixt. of clover and timothy during crop rotation are described. Acid soils often cause a drooping or withering of the clover which reduces the value of the seed mixt. On such soils, $(\text{NH}_4)_2\text{SO}_4$ did not increase the clover in comparison with soils contg. P-K. On limed soils contg. P-K, clover did develop better. Data are presented which indicate that each form of phosphate fertilizer, such as phosphate meal and Thomas slag, increased the percentage of clover more than did superphosphate. Max. yields of the grass mixt., the largest being clover, are obtained through the use of both lime and manure. Other investigations showed that clover required P and that timothy required N, both of which developed well through the use of a complete mineral fertilizer contg. N-P-K. Both the properties of soil and the nutritional regime appear to be decisive factors in preserving the valuable components of the seed mixt. Max. improvement of soil quality is obtained by liming and by the differential introduction of such fertilizers as P under clover and N under timothy. Foliation of the grass is an important sign which det. the quality of seed. Data are presented which indicate the pos. effect of fertilizers and their combinations such as P, P-K, N-P-K, manure, and lime. Wm. H. Fitzpatrick.

Chair of agrochemistry, Moscow State U.

USSR / Farm Animals. Horses.

Iss Jour: Ref Zhur-El 1., 1956, 62501.

Author : Tarasov, M., Chalyuk, N., Melnikova, N.

Iss :

Title : Feeding horses with preserved fodder.

Ref. Lib: Kirov Univ. 1957, 39-41.

Abstract: Feeding horses with preserved alfalfa (mares with suckling foals) and preserved corn (work horses and young horses) increased the coefficient of nitrogen utilization in the excreted substances (by 4 to 6%) and the daily protein stores (by 90 to 120 grams).

Card : 1/1

USSR/Farm Animals - Large Horned Cattle.

6-2

Abs Jour : Ref Zhur - Biol., No 18, 1958, 83330

Author : Mel'nikova, T., Gazdarov, V.

Inst : -

Title : Feeding Preserved Feeds to Cows.

Orig Pub : Molochn. i myasn. zhivotnovodstvo, 1958, No 1, 22-25.

Abstract : The first group of cows was fed ears ensiled by the usual method, the second group of cows was fed ears preserved by the S-2 preparation, and the third group was fed ears preserved by the AIV preparation. These ears were fed to the cows twice daily in amounts of 25-28 kg each time, after they were fed concentrated feeds and before they were fed hay. During a period of 70 days, total milk yields amounted to 761 kg from control cows whereas they averaged about 829 kg from test group cows. Expenditure of concentrated feeds amounted to 289 gr and 265 gr per 1 kg of 4 percent milk, and to 0.94 and 0.90 of feed units,

Card 1/2

TARANOV, M.T., kand.biologicheskikh nauk; MEL'NIKOVA, T.S., kand.
sel'skokhozyaystvennykh nauk; MARKOV, A.K.; AKSENOVA, L.N.;
ZAYARKO, I.N.; ANIKEYEV, I.S.; PRIPUTNEV, V.S.

Chemical preservation of forage grain of high moisture content.
Zemledelie 8 no.9:53-57 S '60. (MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konevodstva (for Taranov).
 2. Vsesoyuznyy institut zhivotnovodstva (for Mel'nikova).
 3. Glavnyy agronom 98-go konnogo zavoda Ryazanskoy oblasti (for Markov).
 4. Glavnyy vetvrach 98-go konnogo zavoda Ryazanskoy oblasti (for Aksenova).
 5. Zaveduyushchiy zernoskladami 98-go konnogo zavoda Ryazanskoy oblasti (for Zayarko).
 6. Nachalnik elevatorno-skladskogo otdela Ryazanskogo upravleniya Khleboproduktov (for Anikayev).
 7. Direktor Rybnovskogo Khlebo-priyemnogo punkta Ryazanskoy oblasti (for Priputnev).
- (Grain--Storage) (Sodium pyrosulfite)

MEL'NIKOVA, T.V.; SLABKOVICH, G.I., red.

[Climate of Magadan] Klimat Magadana. Leningrad, Gidrometeoizdat, 1965. 96 p. (MIRA 18:7)

KLYUKIN, N.K.; MEL'NIKOVA, T.V.

Precipitation measurement. Trudy GGO no.88:16-24 '60.
(MIRA13:8)

(Precipitation (Meteorology)—Measurement)

MEL'NIKOVA, T.V.

Methods for observing the snow cover in the northeastern part of the
U.S.S.R. Trudy GGO no.130:65-73 '62. (MIRA 15:7)

1. Magadanskaya gidrometeorologicheskaya observatoriya.
(Soviet Far East--Snow surveys)

AN5023896

BOOK EXPLOITATION

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551.582.1

Mel'nikova, T. V.

Climate of Magadan (Klimat Magadana). Leningrad, Gidrometeoizdat, 1965.
96 p. illus., biblio., tables. (At head of title: Glavnoye upravleniye
gidrometeorologicheskoy sluzhby pri sovete ministrov SSSR. Kolym-
skaya upravleniye gidrometeorologicheskoy sluzhby. Magadanakaya
gidrometeorologicheskaya observatoriya). 1030 copies printed.

TOPIC TAGS: climatology, arctic condition, hydrometeorology, physical
geography

PURPOSE AND COVERAGE: The conditions of the formation of the climate
of the city of Magadan are described. Magadan is a city in the
Soviet Far East on the shore of the Sea of Okhotsk. Characteristics
of the climatic elements are given, and possible preventive measures
against dangerous natural phenomena are described. Observations,
conducted from 1937 to 1959 at the hydrometeorological station at
Nagayev, were the basis for compiling such a description of the
climate of Magadan. The book is intended for hydrometeorologists,
climatologists, and specialists in agriculture. There are 5 Soviet

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references. Sixteen tables of meteorological data of the region are included in appendixes.

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 - Soil temperature -- 39
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 - 3. Wind regime -- 51

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4. Atmospheric phenomena -- 62

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SUB CODE: 04,08

SUBMITTED: 19Apr65

REF SOV: 005

OTHER: 000

Card 3/3

BABENKO, A., letchik, geroy Sovetskogo Soyuz; MEL'NIKOVA, V., letchik,
geroy Sovetskogo Soyuz.

Helicopters over the North Pole; stories (to be continued). Kryn.
rod. 7 no.2:18-19 F '56. (Arctic regions) (MLRA 9:6)

25955

27.4000 4112,3212

S/141/61/004/001/015/022
E033/E435

AUTHORS: Tsetlin, M.L., Gorokhov, Yu.S., Matusova, A.P.,
Mel'nikova, V.A., Tarantovich, T.M. and Shabashov, V.M.

TITLE: An apparatus for registering and diagnosing disorders
of the rhythmic function of the heart

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika,
1961, Vol.4, No.1, pp.165-172

TEXT: A description is given of an apparatus for the automatic recording and diagnosis of disorders of the rhythmic function of the heart. The apparatus is a logical device utilizing electronic digital computer elements. The initial data for the apparatus are the lengths of the time intervals between the electrocardiogram peaks (R) indicating the depolarization of the ventricles. The length of these intervals is compared with the mean (normal) length averaged over t seconds. As a result of the comparison, each interval is assigned one of three letters: "S" (short), "L" (long), "N" (normal). The changeover occurs at $\pm 25\%$ of the normal interval length. The letters are then assembled into "words". The "words" corresponding to this or that rhythmic disorder (heart block, extra-systoles with, and

Card 1/2

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S/141/61/004/001/015/022

An apparatus for registering ...

E033/E435

without, compensatory pauses, extra-systoles followed by block, paroxysmal tachycardia) are combined in "diagnoses" recorded automatically by the apparatus. The disorders of the rhythmic function of the heart thus detected may serve for the purposes of diagnosing and studying the influence on the patient's organism of various chemical and physical factors. The block schematic of the apparatus is given and the modus operandi described. The apparatus consists of: 1) the transducer of the bipotentials of the heart muscle; 2) the amplifier; 3) the shaper; 4) the "trigger ring"; 5) the pulse tachometer; 6) two reference pulse generators with electronic pulse length control; 7) the memory; 8) the decoder and 9) the registering apparatus. There are 7 figures and 9 references; 6 Soviet-bloc and 3 non-Soviet-bloc. The reference to an English language publication reads as follows: Electronic Engineering, 31, 268 (1959).

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut pri Gor'kovskom universitete (The Scientific-Research Physicotechnical Institute, Gorkiy University)

SUBMITTED: September 6, 1960
Card 2/2

KOROLEV, V.I.; MAKARYCHEV, Yu.K.; MEL'NIKOVA, V.A.; PERMYAKOV, N.V.

Instrument for recording rolling angles, angular velocities and accelerations. Izv.vys.ucheb.zav.; prib. 4 no.3:75-82 '61.

(MIRA 14:6)

1. Issledovatel'skiy fiziko-tekhnicheskiy institut Gor'kovskogo gosudarstvennogo universiteta imeni N.I. Lobachevskogo. Rekomendovana Gor'kovskim issledovatel'skim fiziko-tekhnicheskim institutom.

(Nautical instruments)

VLASOV, V.V.; MEL'NIKOVA, V.A.; YANUS, R.I.

Influence of the demagnetizing effect on the rate of establishing a magnetic induction flux in a ferromagnetic material. Fiz. met. i metalloved. 16 no.6:842-847 D '63. (MIRA 17:2)

1. Institut fiziki metallov AN SSSR.

L 28422-66

ACC NR: AP6007641

SOURCE CODE: UR/0141/66/009/001/0189/0196

AUTHOR: Mel'nikova, V. A.

12
8

ORG: Gor'kiy State University (Gor'kovskiy gosudarstvennyy universitet)

TITLE: Dynamics of the Royer-circuit multivibrator

SOURCE: IVUZ. Radiofizika, v. 9, no. 1, 1966, 189-196

TOPIC TAGS: multivibrator, transistorized multivibrator

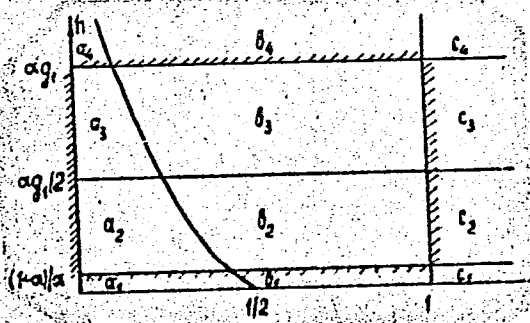
ABSTRACT: Various published works have offered formulas for the amplitude and period of oscillations in the G. H. Royer multivibrator (AIEE Trans., v. 74, 78, 1956) but have not specified the limits of applicability of these formulas. The present article specifies conditions of the multivibrator operation and connects them with the circuit parameters. The circuit-parameter plane is subdivided into several regions that correspond to different operating conditions (see figure).

Card 1/2

UDC: 621.373.431

L 28422-66

ACC NR: AP6007641



Formulas for the amplitude and period of oscillations in the region a_2 are developed. These formulas hold true with and without an additional resistor in the collector circuit. A qualitative experimental verification with P-402 transistors showed that the multivibrator develops a practically square waveform in the regions a_2, a_3, b_2, b_3 . The waveform strongly depends on the number of turns of the windings and on their ratios. Orig. art. has: 8 figures and 24 formulas.

SUB CODE: 09 / SUBM DATE: 28Jun65 / ORIG REF: 009 / OTH REF: 002

Card 2/2 SC

2A
MEL'NIKOVA, V.F.

The effect of thyroid feeding on the course of poisoning
by chloronitrobenzene and aniline V. F. Mel'nikova.
Farmakol. i Toksikol. 2, No. 1, p 17 (1939); *Khim.
Nekrot. Zhur.* 1939, No. 6, Pt 4. Dogs previously fed
with thyroid gland had a more severe anemia and for a
longer period of time, after subcutaneous injection of a
and p-chloronitrobenzene or aniline than did normal dogs.
The increased sensitivity may be caused by a changed
state of the metabolism and by a no of complex changes
in the body which take place during increased thyroid
activity W R Henn

AS 31.1. METALLURGICAL LITERATURE CLASSIFICATION

MELENKOVA, V. E.

Effect of atrophanthin on the exchange of lactic acid in the heart in experimental insufficiency. V. E. Melnikova. Med. Inst., Kharkov. Byull. Eksp. Biol. Med. 13, No. 1/2, 47-9 (1942). Previous expts. have shown that atrophanthin (I) increases the lactic acid content of the normal heart. Heart weakness is usually attributed to altered carbohydrate metabolism of heart muscle associated with a drop in lactic acid content. With a few spontaneously overloaded heart lung preparations of dogs, administration of I relieved the heart by reducing its min. vol. and aortic pressure, accompanied by a return to normal level of the lactic acid content. With artificially overloaded hearts I sometimes gave transitory relief with temporary increase of lactic acid. Because of the limited no. of hearts studied and the abnormality of expl. preps., the results are considered preliminary, and not yet applicable to clinical medicine. K. Starr, Chester

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

GROUP NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CA MELNIKOVA, V. F.

117

Antidote therapy in cases of arsenic poisoning. V. F. Melnikova (Med. Inst., Kiev, Ukraine). *Farm. Toksikol.* 10, No. 6, 52-7 (1947); *Chem. Zvesti* (Russian Zone Ed. 1940, I, 225). The action of mono- and dithiols as antidotes in As poisoning is described. BAL (I) is an excellent antidote. Subcutaneous or intramuscular injections of a 5-10% soln. are surprisingly effective in cases of poisoning with lewisite or other As compds. A complete antidote effect requires 8.5 mol. I per atom of As. It is also an effective antidote in cases of acute poisoning with Sb, Bi, Cr, Ni, or Hg salts or Cd compds. M. G. Moore

1961

ABRAMOVA, Zh.I., kand. med. nauk; ANICHKOV, S.V., prof.; BELEN'KIY, M.L.,
 prof.; VAL'DMAN, A.V., doktor med. nauk; VEDEYEVA, Z.I., kand.
 med. nauk; VINOGRADOV, V.M., kand. med. nauk; GERSHANOVICH, M.L.,
 kand. med. nauk; GINETSKIY, A.G., prof.; GORBOVITSKIY, S.Ye.,
 prof.; GREBENKINA, M.A., dotsent; GREKH, I.F., dots.; DENISENKO,
 P.P., kand. med. nauk; D'YACHENKO, P.K., kand. med. nauk; ZHESTYANIKOV,
 V.D., kand. med. nauk; ZAUGOL'NIKOV, S.D., prof.; ZEYMAL', E.V., kand.
 med. nauk; ISKAREV, N.A., kand. med. nauk; KARASIK, V.M., prof.;
 KIVMAN, G.Ya., kand. med. nauk; KOZLOV, O.D., kand. med. nauk; KROTOV,
 A.I., doktor veter. nauk; KUDRIN, A.N., doktor med. nauk; LAZAREV, N.V.,
 prof.; LAPIN, I.P., kand. med. nauk; MEL'NIKOVA, V.F., prof.;
 MESHCHERSKAYA, K.A., prof.; MIKHEL'SON, M.Ya., prof.; MOSHKOVSKIY,
 Sh.D., prof.; PADEYSKAYA, Ye.N., kand. med. nauk; PARIBOK, V.P., prof.;
 PERSHIN, G.N., prof.; PLANEL'YES, Kh.Kh., prof.; PONOMAREV, G.A.,
 prof.; POSKALENKO, A.N., kand. med. nauk; MUKHIN, Ye.A., dots.;
 ROZOVSKAYA, Ye.S., dots.; RYBOLOVLEV, R.S., starshiy nauchnyy sotr.;
 SALLYAMON, L.S., kand. med. nauk; SAFRAZBEKIAN, R.R., kand. biol. nauk;
 TIUNOV, L.A., kand. med. nauk; TOMILINA, T.N., dots.; FELISTOVICH,
 G.I., kand. med. nauk; FRUYENTOV, N.K., kand. med. nauk; KHAUNINA,
 R.A., kand. med. nauk; TSYGANOV, S.V., prof.[deceased]; CHERKES, A.I.,
 prof.;

(Continued on next card)

ABRAMOVA, Zh.I.---(continued) Card 2.

CHERNOV, V.A., doktor med. nauk; SHADURSKIY, K.S., prof.;
YAKOVLEV, V.Ya., doktor khim. nauk; MASHKOVSKIY, M.D., red.;
NIKOLAYEVA, M.M., red.; RULEVA, M.S., tekhn. red.; CHUMAYEVA,
Z.V., tekhn. red.

[Manual on pharmacology] Rukovodstvo po farmakologii. Leningrad,
Medgiz. Vol.2. 1961. 503 p. (MIRA 15:1)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Anichkov, Karasik, Cherkes). 2. Chlen-korrespondent Akademii medi-
tsinskikh nauk SSSR (for Belen'kiy, Ginetsinskiy, Moshkovskiy,
Planel'yes).

(PHARMACOLOGY)

CHERKES, Aleksandr Il'ich; MEL'NIKOVA, Valentina Fedorovna; SLASTEN, M.I.,
red.; GITSHTEYN, A.D., tekhn. red.

[Manual on drug therapy] Posobie po farmakoterapii. Kiev, Gos.
med. izd-vo USSR, 1961. 551 p. (MIRA 14:11)
(MEDICINE---FORMULAE, RECEIPTS, PRESCRIPTIONS)

LOPATINSKIY, V.P.; SIROTKINA, Ye.Ye.; Prinimali uchastiye: MEL'NIKOVA, V.G.;
AKHMETZ'YANOVA, I.B.

Separation of carbazole from crude acetylene with the aid of paraformaldehyde. Izv.TPI 111:107-109 '61. (IIR 16:9)

1. Predstavleno professorom doktorom khimicheskikh nauk L.P.Kulevym.
(Carbazole) (Acetylene) (Paraformaldehyde)

CHEKMENEV, Nikolay Modestovich; KRIVOBOKOV, Ivan Andreyevich, inzh.;
CHEREDKOV, Mikhail Nikolayevich, inzh.; KAZAKOV, A.A., kand.
tekhn. nauk, retsenzent; MEL'NIKOVA, V.I., inzh., retsenzent;
KHOMIAKOVA, Z.P., tekhn., retsenzent; MARENKOVA, G.I., inzh., red.;
USENKO, L.A., tekhn. red.
[Signaling systems, their installation and maintenance] Ustroi-
stvo STsB, ikh montazh i soderzhanie. Moskva, Transzheldor-
izdat, 1962. 412 p. (MIRA 15:11)
(Railroads--Sginaling--Block system)

KHARLAMPOVICH, G.D.; RUS'YANOVA, N.D.; MEL'NIKOVA, V.I.; GORDEYEVA, Z.K.;
Prinimali uchastiye: MIRONOV, V.I., laborant; MAKAROVA, Z.A.,
laborant; KUDRYASHOVA, R.I., student; TATARUOV, G.P., student;
SELITSKIY, G.A., student; IL'CHENKO, P.P., student; MOSKOVSKIKH, V.V.,
student; YEVSEYEV, Ye.I., student

Studying the new method of ammonia recovery in an experimental
industrial installation. Koks i khim. no.2:34-38 '62.

(MIRA 15:3)

1. Ural'skiy politekhnicheskiy institut.
(Coke-Oven gas) (Ammonia)

MEL'NIKOVA, V.I.

82634

18.1250

S/126/60/010/02/004/020

E111/E352

AUTHORS: Mel'nikova, V.I. and Bogachev, I.N.

TITLE: Volume Changes in the Alloy Ni_3Mn During Ordering

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol. 10.
No. 2, pp 200 - 206

TEXT: It has been reported (Refs. 1-6) that transition of a nickel-manganese alloy close in composition to the stoichiometric into the ordered state is accompanied by changes in some properties. The object of the present work was to study the corresponding volume changes in a Ni_3Mn alloy (25% Mn, 0.6% Fe, 0.03% C, 0.014% S, 0.24% Si and 0.0063% P). 3-mm diameter, 50-mm long cylindrical specimens were tested on a Chevenard dilatometer with automatic recording. being used as the standard. Figs. 1 and 2 represent, respectively, relative contraction for isothermal conditions as functions of time (up to 23 hours) at various temperatures and of temperature (350-515 °C) for the various times. X-ray structural analysis by back reflection agreed with the volume changes observed. Tests were also carried out with continuous heating of the test piece: Fig. 3 shows difference between the length

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E111/E352

Volume Changes in the Alloy Ni_3Mn During Ordering

changes of the standard and the specimen as functions of temperature for different heating rates and the alloy in different initial states. From the dilatometric curves the coefficient of linear expansion of the alloy was found: this is shown as a function of temperature for the ordered alloy (lefthand graph) and for the alloy pre-ordered at $485^{\circ}C$ (righthand graph); the corresponding curve for the disordered alloy is shown in Fig. 5. The work confirmed the results of preliminary experiments showing that transition into the ordered state is accompanied by shrinkage. Volume-change and ordering attain greatest speed at $450 - 475^{\circ}C$. It is suggested that the volume change is due to different ordering speed below T . The order-disorder transition temperature is $475 - 520^{\circ}C$. The transition leads to a sharp change in the value of the coefficient of thermal expansion in the temperature range in which the transition occurs. There are 5 figures and 20 references: 4 Soviet, 3 German, 4 international and 9 English.

Card 2/3

82634

S/126/60/010/02/004/020

E111/E352

Volume Changes in the Alloy Ni_3Mn During Ordering

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S.M. Kirova
(Ural Polytechnical Institute im. S.M. Kirov)

SUBMITTED: March 29, 1960

Card 3/3

S/126/61/012/005/007/028
E025/E435

AUTHORS: Bogachev, I.N., Mel'nikova, V.I.

TITLE: Kinetics of ordering in the alloy Ni_3Mn

PERIODICAL: Fizika metallov i metallovedeniy, v.12, no.5, 1961, 678-684

TEXT: The ordering kinetics of the phase Ni_3Mn are studied by measuring the changes in electrical resistivity, saturation magnetization and coercive force during the isothermal annealing of the completely disordered alloy at temperatures below the critical ordering temperature T_c . It is shown that in each case the changes take place in two stages. Resistivity initially increases slightly then decreases rapidly. The saturation magnetization first increases rapidly with subsequent fall-off of the rate of increase; the coercive force rises sharply after an initial static period. In all three cases, the rate of ordering is greatest for the specimens in the range 450 to 475°C, some 60°C below T_c . The two stages of ordering are discussed in terms of the initial growth of nuclei as antiphase domains and the subsequent growth and coagulation of these domains. It is suggested that in the temperature range 450 to 475°C conditions

Card 1/2

Kinetics of ordering

S/126/61/012/005/007/028
E025/E435

are the most favourable for nucleation of the ordered phase and thus the approach to the fully ordered state occurs at the greatest rate. There are 6 figures and 17 references. 3 Soviet-bloc and 14 non-Soviet-bloc. The four most recent references to English language publications read as follows:
Ref. 13: Burns F.P., Quimby S.L., Phys. Rev., v. 97, 1955, 6
Ref. 14: Lord N.W., J. Chem. Phys., v. 21, 1953, 692
Ref. 15: Feder R., Moony M., Nowick A.S., Acta met., v. 6, no. 4, 1958, 803.
Ref. 16: O'Brien J.L., Kuczynski G.C., Acta met., v. 7, no. 12, 1959, 803.

ASSOCIATION: Ural'skiy politekhnicheskii institut im. S.M. Kirova
(Ural Polytechnical Institute im. S. Kirov)

SUBMITTED: March 6, 1961

Card 2/2

lot
S/126/62/013/002/009/019
E021/E480

18-1743

AUTHORS: Bogachev, I.N., Mel'nikova, V.I.
TITLE: The influence of plastic deformation on the process
of ordering in nickel-manganese alloy
PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.2, 1962,
248-257

TEXT: The two alloys investigated contained:
Alloy 1: 23.54% Mn, 0.63% Fe, 0.07% C, 0.21% Si, 0.005% P and
0.027% S; Alloy 2: 23.30% Mn, 0.68% Fe, 0.02% C, 0.24% Si,
0.007% P and 0.017% S. Wire samples prepared from Alloy 1
were quenched in water from 1000°C. Various stages of ordering
were obtained by holding for different times at 450°C and
quenching in water. The samples were then deformed by drawing
at room temperature. The change in electrical resistance in the
process of plastic deformation was followed. Electrical
resistance and mechanical properties were measured on cold-drawn
Alloy 2 wire with 89% deformation. Magnetic measurements were
carried out on cylindrical specimens (3 mm diameter, 50 mm length)
with 88% reduction. After heating at 350, 400, 425, 450, 475 and
Card 1/3

The influence of plastic deformation ... S/126/62/013/002/009/019
E021/E480

500°C, the samples were water-quenched and measurements were carried out at room temperature. Results showed that plastic deformation of samples in the quenched state or in the initial stages of ordering decreased the electrical resistance but increased it in the later stages of ordering. The difference in effects is attributed to the different structural states. Electrical resistance, magnetic properties and tensile strength of deformed nickel-manganese alloys changes in two stages during ordering. In the first stage the change is probably caused by the occurrence of a large number of ordered regions of small dimensions. The second stage is connected with the increase in size of the ordered domains and an increase in quantity of ordered material. The maximum rate of the ordering process is observed in the range 450 to 475°C. Near the temperature of phase transformation the rate of ordering is slow as a result of the small difference between the free energy of ordered and disordered phases. The decrease in ordering rate at temperatures below 450°C is probably connected with a decrease in the mobility of atoms. There are 5 figures and 1 table.

Card 2/3

S/126/62/013/002/009/019

The influence of plastic deformation .. E021/E480

ASSOCIATION: Ural'skiy politekhnicheskiy institut
im. S.M.Kirova (Ural Polytechnical Institute
imeni S.M.Kirov)

SUBMITTED: March 6, 1961

Card 3/3

X

S/185/63/008/002/007/012
D234/D308

AUTHORS: Mel'nikova, V. I. and Bogachev, I. N.

TITLE: Kinetics of the ordering in the Ni_3Mn alloy

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 8, no. 2, 1963,
219-226

TEXT: The authors investigated the dependences of electrical resistance, saturation magnetization, coercive force, volume and thermal emf on the duration of isothermal treatment at 350, 400, 425, 450, 475 and 500°C. The velocity of transition into ordered state was found to be maximal at 450 and 475°C. Conclusions: there are two stages of variation of resistance, magnetization and coercive force, which the authors attribute to properties of structural transformation during ordering. Plastic deformation does not always affect the variation of electrical resistance in the same manner at different stages of ordering, which is probably due to different structural states of the alloy at these stages. Plastic deformation

Card 1/2

Kinetics of the ordering ...

S/185/63/008/002/007/012
D234/D308

affects substantially the variation of physical properties in subsequent isothermal treatment below the phase transition temperature T_c , but general regularities of the kinetics of ordering are as in the hardened alloy. There are 6 figures.

ASSOCIATION: Ural'skiy politekhnicheskii institut (Ural Polytechnic Institute), Sverdlovsk

Card 2/2

VOROB'YEV, O.Ye.; SOKOLOVA, N.I.; MEL'NIKOVA, V.I.; SHABAROVA, E.A.;
PROKOF'YEV, M.A.

Dinucleoside phospho-($P_m \rightarrow N$)-amino acid. Dokl. AN SSSR 166
no.1:95-98 Ja '66. (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet. Submitted April 21,
1965.

MEL'NIKOVA, V. K.

17 (3, 6)

201/5-20-2/27

AUTHOR: Alatyrtseva, I. Ye., Nemshilova, N. A., Zhasamaldinov, A. D., Saytasheva, Kh. D., Infilitonova, H. Z., Mel'nikova, V. K., and Kolobova, N. K.

TITLE: A Study of the Reactogenicity of Pertussis-Diphtheria Vaccine

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, Nr 4, pp 34 - 39 (USSR)

ABSTRACT: The authors summarize the data on the reactogenicity of pertussis-diphtheria vaccine, derived from mass immunization with such vaccine prepared by the Institut mikrobiologii i epidemiologii imeni Gamalei AMN SSSR (Institute of Microbiology and Epidemiology imeni Gamaleya of the AMN, USSR) at Zelenodol'sk in the Tatar ASSR. Most of the reactions in children immunised with the vaccine were weak (30.6%) or mild (32.3%). After the second and third inoculation, the percentage of children with a general reaction declined. Most of the children who did react showed a weak general reaction. Local reactions were more common than general ones. Most of the children who reacted did so with a weak (49.6%) or moderate (51.5%) local reaction. After the second and third inoculation the percentage of children with a local reaction dropped. The reactogenicity of the vaccine varied

Card 1/2

ASSOCIATION: Kazanakiy Institut epidemiologii i gigiyeny (Institute of Epidemiology and Hygiene, Kazan')

SUBMITTED: June 16, 1959

Card 2/2

ALATYRTSEVA, I.Ye., KOLPACHIKHIN, F.B.; AMFITEATROVA, N.F.; SHAROVSKAYA, V.N.;
DVORKINA, A.I.; MEL'NIKOVA, V.K.; BERZON, I.G.

Intranasal revaccination against diphtheria. Report No. 1. Vop.okh.
mat.i det. 7 no.4:29-32 Ap '62. (MIRA 15:11)

1. Iz Kazanskogo nauchno-issledovatel'skogo instituta epidemiologii,
mikrobiologii i gigiyeny.
(DIPHTHERIA—PREVENTIVE INOCULATION)

KHISAMUTDINOV, A.G.; ALATYRTSEVA, I.Ye.; NEMSHILOVA, N.A. [deceased];
MEL'NIKOVA, V.K.

Experience in the control of whooping cough with vaccination of children on a large scale. Zhur. mikrobiol., epid. i immun. 33 no.11:23-27 N :62. (MIRA 17:1)

1. Iz Kazanskogo instituta epidemiologii, mikrobiologii i gigiyeny.

MEL'NIKOVA, V.L.

Bertrandite from Kazakhstan. Izv. All Kazakh. SSR Ser.geol. no.2:
105-108 '62. (MIRA 15:6)

(Kazakhstan--Bertrandite)

MEL'NIKOVA, V.L.

Hypogenic replacement of wolframite by scheelite. Trudy Inst.
geol.nauk AN Kazakh.SSR 6:218-225 '62. (MIRA 16:6)
(Wolframite) (Scheelite)

MEL'NIKOVA, V.L.

Hypogene mineralization of the Dzhanet rare metal deposit.
Trudy Inst. geol. nauk. AN Kazakh.SSR 7:5-51 '63. (MIRA 17:9)

L 32599-66 EWT(m)/ENP(w)/ENA(d)/T/ENP(t)/ENP(z)/ENP(b) JD/DJ
ACC NR: AP5017079 SOURCE CODE: UR/0380/65/000/004/0108/0114

AUTHOR: Vaynshteyn, V. E. (Moscow); Suchkova, O. A. (Moscow); Memelov, V. L. (Moscow)

ORG: none

TITLE: Effect of abrasive conditions on the friction characteristics of molybdenum disulfide

SOURCE: Mashinovedeniye, no. 4, 1965, 108-114

TOPIC TAGS: molybdenum disulfide, friction coefficient, metal friction

ABSTRACT: The author study the effect of the sliding rate and loading on the coefficient of friction in molybdenum disulfide. A 20-30 μ layer of molybdenum disulfide was applied to the ends of annular bronze specimens. The material for the other member of the friction pair was 2Kh13 steel. The effect of surface finish on the friction properties of molybdenum disulfide was also studied. The effect of continuous stationary contact on the coefficient of friction in MoS₂ was studied by applying a layer of molybdenum sulfide to the internal surface of bronze sleeves

UDC: 621.894:

Card 1/2

L 32599-66

ACC NR: AP5017079

and mounting them on 2Kh13 steel shafts. Curves for the coefficient of friction in molybdenum disulfide as a function of sliding rate show a reduction in the coefficient of friction with an increase in sliding rate up to 1.5 m/sec. Beyond this point, friction increases with sliding rate. A curve for the coefficient of friction as a function of temperature close to the friction surface shows a reduction in friction with an increase of temperature below 100°. This is probably due to a reduction in the moisture content on the friction surface. There is an increase in friction with temperature beyond this point due to the partial oxidation of molybdenum disulfide on the friction surface. It was found that an increase in pressure reduces the coefficient of friction. 48 hours of stationary contact increases the coefficient of friction from 0.14-0.17 to 0.28-0.30. Under sliding friction conditions, this coefficient drops rapidly to the initial value. Experiments indicate that this phenomenon is due to the formation of molybdenum trioxide which absorbs moisture from the air during the stationary period. Tests indicate that a GOST 2789-59 class 8 finish is optimum for steel parts working against self-lubricating materials based on MoS₂. The coefficient of friction is reduced considerably by operation in a vacuum. Orig. art. has: 6 figures, 1 table.

SUB CODE: 11/

SUBM DATE: 19Jan65/

ORIG REF: 000/

OTH REF: 010

Card 2/2

MEL'NIKOVA, V.M., PETRUSHINA, L.I.

Differentiation of pathogenic staphylococci isolated from patients' wounds and from pharynxes and noses of the personnel by means of the phage typing method. Sov. med. 28 no.9:832-85 S '65. (MIRA 18:9)

1. Tsentral'nyy inst. det. traumatologii i ortopedii (dir. - prof. M.V.Volkov) Ministerstva zdravookhraneniya SSSR i Institut pitaniya (dir. - prof. A.A.Pikrovskiy), ANU SSSR, Moskva.

MEL'NIKOVA, V.M.

Determination of the sensitivity to antibiotics in the micro-
flora from suppurating wounds by the method of "mirror im-
prints". Antibiotiki 8 no.2:126-132 F'63. (MIRA 16:7)

1. Mikrobiologicheskaya laboratoriya (zav. G.M.Belen'kaya)
TSentral'nogo instituta travmatologii i ortopedii.
(SUPPURATION) (ANTIBIOTICS) (PHAGOCYTOSIS)

MEL'NIKOVA, V.M.; BELIKOV, G.P.; POPELLEIN, V.P.

Use of β -propiolactone for the sterilization of some tissue
grafts. Ortop., travm. i protez. 25 no.4833-36 Ap '64
(MIRA 1821)

1. Iz Tsentral'nogo instituta travmatologii i ortopedii (direk-
tor - chlen-korrespondent AMN SSSR prof. M.V. Volkov) i Vse-
sovniznogo khimikofarmatsevticheskogo instituta imeni S.O. Or-
nikov (direktor - prof. M.V. Rukhsor). Adres avtorov: Moskva,
A-299, Novaya Ipatovka, d.8., Tsentral'nyy institut travmato-
logii i ortopedii.

KONTORVICH, A. I., KONTOROVICH, I. I., LIKHTERAYA, I. F., MELNIKOV, I. M.,
STAROVA, I. F.

Disseminated by: [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted]
Siberian Flt. [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted]

1. [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted]

VOLKOV, M.V., prof., BALABA, T.Ya., doktor med. nauk; MEL'NIKOVA, V.M.,
kand. med. nauk; SHNEPELEVA, I.S., kand. med. nauk

Modern achievements of chemistry in the practice of traumat-
ology and orthopedia; results of the work of the Central
Institute of Traumatology and Orthopedia. Ortop., travm.
i protez. 26 no.8:3-10 Ag '65. (MIRA 18,9)

1. Chlen-korrespondent AMN SSSR (for Volkov).

MEL'NIKOVA, V.M. (Leningrad, ul. Pestelya, d. 25, kv.7)

An outstanding Russian surgeon, Nikolai Vladimirovich Ekk; 1848-1908.
Vest.khir. 77 no.10:134-139 O '56. (MLRA 9:12)

1. Iz khirurgicheskoy kliniki (zav. - prof. A.N.Filatov) Leningrad-
skogo instituta perelivaniya krovi.
(EKK, NIKOLAI VLADIMIROVICH, 1848-1908)

MEL'NIKOVA, V.N. (Leningrad, ul. Pestelya, d.25, kv.7)

Use of protein hydolysates for the treatment of surgical patients.
Vest.khir. 83 no.12:54-59 D '59. (MIRA 13:5)

1. Iz khirurgicheskogo otdeleniya (zav. - kand.med.nauk A.A.
Kalendarev) bol'nitsy im. Semashko Pushkinskogo rayona gor.
Leningrada.

(BLOOD PLASMA SUBSTITUTES)

FILATOV, A.N., prof.; KARTASHEVSKIY, N.G.; MEL'NIKOVA, V.N.; SOBOLEV, V.K.
(Leningrad)

Possibility of utilizing a cadaver lung as a dialyzing system in renal insufficiency instead of the artificial kidney; experimental study. Pat. fiziol. i eksp. terap. 6 no.3:49-52 My-Je'62
(MIRA 17:2)

1. Iz laboratorii konservirovaniya i peresadki tkaney Leningradskogo nauchno-issledovatel'skogo instituta perelivaniya krovi (nauchnyy rukovoditel' instituta - chlen-korrespondent AMN SSSR, zasluzhennyy deyatel' nauki prof. A.N. Filatov, direktor - dotsent A.D. Belyakov).

GERMAN-GALKINA, A.S.; ZLOKAZOVA, T.M.; MEL'NIKOVA, V.P.; SIDORENKO, V.V.

Use of hydrocyclones in thickener units for the separation of
solids in alumina-bearing sinters. TSvet. met. 34 no.1:52-54

Ja 61.

(MIRA 17:3)

MEL'NIKOVA, V.P.; FALATOV, A.N., professor, zaveduyushchiy.

Rare case of strangulation of the cecum with the vermiform appendix in the peritoneal pouch. Vest.khir. 73 no.4:52-53 JI-Ag '53. (MLBA 6:8)

1. Khirurgicheskaya klinika Leningradskogo meditsinskogo stomatologicheskogo instituta. (Intestines--Diseases)

MEL'NIKOVA, V.P., kand.med.nauk; FILIPPOVA, V.N., kand.biol.nauk

Presence of novocaine in the blood in local anesthesia and in paranephric block. Akt.vop.pereb.krovi no.6:298-300 '58. (MIRA 13:1)

1. Kafedra obshchey khirurgii i Leningradskogo meditsinskogo instituta (zav. kafedroy - chlen-korrespondent AMN SSSR prof. A.N. Filatov) i biokhimicheskaya laboratoriya Leningradskogo instituta perelivaniya krovi (zav. laboratoriyey - prof. I.F. Seyts).
(NOVOCAINE) (BLOOD-ANALYSIS AND CHEMISTRY)

MEL'NIZOVA, V.P., kand.med.nauk (Leningrad, Lermontovskiy pr., d.54, korp.
1), kv.42)

Experimental alloplasty of the cervical esophagus [with summary in
English]. Vest. khir. 80 no.2:12-20 F '58. (MIRA 11:3)

1. Iz kafedry obshchey khirurgii 1-go Leningradskogo meditsinskogo
instituta im. I.P.Pavlova (zav.-prof. A.N.Filatov) i gistologicheskoy
laboratorii Leningradskogo instituta perelivaniya krovi (zav.-
starshiy nauchnyy sotrudnik V.P.Teodorovich)
(ESOPHAGUS, surg.

exper. alloplasty of cervical area in animals (Rus)

MEL'NIKOVA, V.P., kand.med.nauk

Treatment of patients in the acute period of Werlhof's disease.
Vest.khir. 83 no.12:29-33 D '59. (MIRA 13:5)

1. Iz kliniki obshchey khirurgii (zav. - prof. A.N. Filatov) 1-go
Leningradskogo meditsinskogo instituta i Leningradskogo ordena
Trudovogo Krasnogo Znameni instituta perelivaniya krovi (dir. -
dotsent A.D. Belyakov). Adres avtora: Leningrad, ul. L. Tolstogo,
d. 6/8, kafedra obshchey khirurgii.

(PURPURA (PATHOLOGY))

(SPLEEN---SURGERY)

MEL'NIKOVA, V.P.; VODOKHLEBOVA, Ye.G.

Use of dibazol for the prevention of surgical shock. Vest. khir. 85
no. 7:101-108 Je '60. (MIRA 14:1)
(SHOCK) (BENZIMIDAZOLE) (SURGERY, OPERATIVE)

MATROV, V.I.; MEDVINKOVA, V.P.

Use of dolomite limestone in producing aluminum oxide from aluminum
silicates by calcining with lime. "Svet. nat. 38 no.4:50-52 Ap '65.
(MIRA 18:5)

MASLIYEVA, Z.M.; MEL'NIKOVA, V.S.

Removal of impregnated gunpowder. Vest.derm.i ven. 35 no.5:
83-85 '62. (MIRA 15:5)

1. Iz kafedry kozhnykh i venericheskikh bolezney (dir. - doktor
med.nauk L.A. Neradov) Kubanskogo meditsinskogo instituta (dir. -
prof. V.K. Suprunov).
(FACE—WOUNDS AND INJURIES) (GUNSHOT WOUNDS)

MEL'NIKOVA, V.V.

Algae of Sierozem soils in southern Tajikistan. Izv.Otd.est.nauk
AN Tadzh.SSR no.9:131-141 '55. (MLRA 9:10)

1. Institut botaniki AN Tadzhikskoy SSR.
(Tajikistan--Algae) (Tajikistan--Sierozem soil)

MEL'NIKOVA, V.V.

Origin of soil algae. Izv.Otd.est.nauk AN Tadzh.SSR no.10:
73-81 '55. (MLRA 9:10)

1. Institut botaniki AN Tadzhikskoy SSR.
(Soil micro-organisms) (Algae)

MEL'NIKOVA, V.V.

Study of rock algae of central and southern Tajikistan.
Izv.Otd.est.nauk AN Tadjh.SSR no.10:95-100 '55.

(MLRA 9:10)

1. Institut botaniki AN Tadjhiskoy SSR.
(Tajikistan--Soil micro-organisms) (Algae)

MEL'NIKOVA, V. V.

Algae of the belt of Sierozem soils in Tajikistan. Trudy Bot.
inst. AN Tadzh. SSR. 18:286-313 '62. (MIRA 16:1)

(Tajikistan—Algae)
(Tajikistan—Sierozem soils)

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S/126/61/012/001/012/020
E193/E480

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AUTHORS:

Pavlov, V.A., Gaydukov, M.G., Noskova, N.I.
Mel'nikova, V.V.

TITLE:

The role of slip and diffusion in plastic deformation
during creep of nickel-copper alloys

PERIODICAL:

Fizika metallov i metallovedeniye, 1961, Vol.12, No.1,
pp.97-107

TEXT:

This paper was presented at the session of the Nauchnyy
sovet po probleme prochnosti i plastichnosti tverdykh tel AN SSSR
(Scientific Council on the Problems of Strength and Plasticity of
Solids AS USSR) in June 1960.
Slip or diffusion constitute the two possible mechanisms of plastic
deformation. No agreement has been reached regarding the
mechanism of plastic deformation in creep. According to one
school of thought represented by S.N.Zhurkov, the diffusion
processes play no significant part in plastic deformation in creep,
an opposite view being held by the other school of thought
represented by B.Ya.Pines. Since both these opinions are based on
experimental data, the most likely explanation of this apparent
contradiction is that either mechanism can operate depending on the
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conditions of stress and temperature, and the object of the present investigation was to study the effect of these two factors on the mechanism of plastic deformation in creep of Ni-Cu alloys. The Ni-Cu system was chosen for this purpose because (a) an increase in the Cu content in Cu-Ni alloys brings about a decrease in the elastic modulus and the characteristic temperature of these alloys and an increase in the magnitude of the static distortions of the crystal lattice and (b) the activation energy for diffusion of copper in nickel is almost 1.5 times higher than that for self-diffusion of pure nickel, the former amounting to 35000 to 40000 cal/mol. These data indicate that the addition of Cu to Ni decreases the interatomic bond forces and, consequently, increases the intensity of the diffusion processes, even at relatively low temperatures. The vacuum-melted experimental alloys, containing 10, 20, 40 and 60% Ni, were prepared from 99.99% Ni and electrolytic copper containing less than 0.05% impurities. The ingots were forged into 18 mm diameter rods from which the test pieces, 6 mm in diameter and 50 mm (for creep tests) or 100 mm (for stress relaxation tests) long, were prepared.

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These were annealed at 800 to 900°C, the annealing temperature for each alloy having been selected so as to obtain the same grain-size (approx. 0.1 mm) in all test pieces. The rate of plastic deformation varied between 10^{-4} and 10^{-11} (sec^{-1}). In the first stage of the investigation, the effect of alloy composition and experimental conditions on the rate of deformation $\dot{\epsilon}$ was studied. The results relating to steady creep are reproduced in Fig.1, where $\log \dot{\epsilon}$ (sec^{-1}) is plotted against the Cu content (%) in the alloys tested at 5 kg/mm². The test temperature is indicated by each curve. In Fig.2, $\log \dot{\epsilon}$ (sec^{-1}) is plotted against the Cu content (%) in alloys tested at 600°C, the magnitude of the applied stress (2 and 9 kg/mm²) being indicated by each curve. In the next stage of the investigation the relationship between the applied stress σ and the activation energy Q of the deformation process was studied. The results are reproduced graphically. In Fig.5, Q (kcal/mol) is plotted against σ (kg/mm²), the experimental points denoted by crosses, circles and dots relating, respectively, to pure nickel, 40% Cu-Ni alloy and 60% Cu-Ni alloy. In Fig.6, $\log \dot{\epsilon}$ (sec^{-1}) is plotted against $10^3/T$ (where T is the absolute temperature) for the 40% Cu-Ni

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alloy tested under conditions of stress relaxation, curves 1 to 7 relating, respectively, to $\sigma = 0.4, 0.6, 0.8, 1.0, 1.2, 1.4$ and 1.6 kg/mm^2 . Fig.7 shows the same relationship for the 40% Cu-Ni alloy tested under conditions of creep, curves 1 to 4 relating, respectively, to $\sigma = 2, 3, 4$ and 5 kg/mm^2 . Finally, the effect of applied stress and temperature on the rate of deformation was determined. Some of the results are reproduced in Fig.8 and 9. In Fig.8, $\dot{\epsilon} \times 10^9 \text{ (sec}^{-1}\text{)}$ is plotted against $\sigma \text{ (kg/mm}^2\text{)}$ for the 40% Cu-Ni alloy tested at 600°C , Fig.9 showing the same relationship for the 60% Cu-Ni alloy. Correlation of these with results of X-ray diffraction analysis, data obtained by other workers, and theoretical considerations led the present authors to the following conclusions. (1) The processes of creep and relaxation can be regarded as a result of a complex interaction between deformation by slip and diffusion. The relative part played by each of these mechanisms depends on temperature and on the magnitude of the applied stress. (2) Under the conditions of low temperature and high applied stresses, the plastic deformation in creep can be described by the expression, due to S.N.Zhurkov.

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$$\dot{\epsilon} = \dot{\epsilon}_0 e^{-\frac{Q - \gamma \sigma}{RT}}$$

High activation energy and the fact that the above relationship is valid for low temperature and high rates of deformation indicates that under these conditions plastic deformation in creep takes place predominantly by the mechanism of slip. (3) Under conditions of high temperature and low applied stresses, the activation energy for the deformation increases with decreasing stress and approaches the activation energy for the diffusion of the alloying element. In this case the process of deformation in creep can be described by the known equation for plastic deformation by diffusion:

$$\dot{\epsilon} = \frac{D_0 a^3}{l^2 kT}$$

Under these conditions of deformation the strength of alloys decreases and may be lower than that of unalloyed metal which indicates the predominance of the diffusion mechanism of deformation. Card 5/8

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(4) In the intermediate region of temperature and stress, plastic deformation by slip takes place side by side with the diffusion relaxation process. The results of X-ray analysis indicate that under these conditions the plastic deformation brings about fragmentation of the crystals and formation of blocks. In this case the deformation in creep is approximately described by the formula due to J.J.Weertman (Ref.28: J.Appl.Phys., 1955, 26, 1213)

$$\dot{\epsilon} = C \left[\sigma^a / RT \right] \exp(-Q/RT)$$

There are 12 figures, 3 tables and 28 references: 18 Soviet and 7 non-Soviet. The four most recent references to English language publications read as follows: Ardley G.W. Acta met., 1955, 3, 525; Greenough A.P. Phil. Mag., 1958, 3, 1032; McLean D. Inst.Metals, 1952-53, 81, 287; Weertman J. J.Appl.Phys., 1955, 26, 1213.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals AS USSR)

SUBMITTED: December 22, 1960

Card 6/8

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S/126/61/012/005/017/028
E091/E335

AUTHORS: Pavlov, V.A., Gaydukov, M.G. and Mel'nikova, V.V.

TITLE Mechanism of plastic deformation in the creep of
aluminium-magnesium alloys

PERIODICAL: Fizika metallov i metallovedeniye v 12. no. 5.
1961. 748 - 755

TEXT: Pure aluminium and aluminium alloys containing 0.1, 1 and 2% Mg were investigated. The alloys were melted under flux in a high-frequency furnace. The ingots were forged into rods of 18 mm diameter, from which specimens 50 mm long and 8 mm in diameter were made for creep-testing and other 100 mm long and 8 mm in diameter for stress-relaxation testing. The specimens were annealed at 420 - 440 °C. For each alloy, the annealing temperature was selected so that a linear grain diameter of 0.1 mm should be obtained. The rate of plastic deformation was chosen within the limits 10^{-4} sec^{-1} to $10^{-10} \text{ sec}^{-1}$. Rates below 10^{-8} sec^{-1} were obtained during stress-relaxation and the higher rates in creep. The mechanism of plastic deformation could be
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Mechanism of plastic

judged from the dependence of the rate of deformation on solid-solution concentration, from the energy of activation and its dependence on stress and from the dependence of the rate of deformation on stress. It was found that the mechanism of plastic deformation under conditions of creep and stress relaxation, both in Al-Mg and Ni-Cu alloys, underwent a change on varying the conditions of deformation. As a result of such changes, diffusion processes begin to play an ever-increasing role with increase in temperature and decrease in deformation stresses. At relatively low temperatures and high deformation stresses the mechanism of plastic deformation is governed by slip. The diffusion mechanism predominates in the region of high temperatures and low stresses. Plastic deformation by slip takes place in the intermediate range of temperature and stresses in conjunction with relaxation processes. Alloying Al with Mg leads to an extension of the stress range in which diffusion processes play a noticeable role in plastic deformation. This extension is due to the increased resistance to the development of deformation by slip and due to a greater decrease in the energy

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Mechanism of plastic

of activation with increase in stresses in the alloys as the diffusion mechanism of plastic deformation proceeds. S.N. Zhurkov, T.P. Sanfirova, B.Ya. Pines and A.F. Sirenko are mentioned in the article in connection with their contributions in this field. There are 11 figures, 1 table and 18 references: 14 Soviet-bloc and 4 non-Soviet-bloc. The four English-language references mentioned are: Ref. 9: F.R. Nabarro - Rep. Conf. Strength of Solids, L, 1948, 75; Ref. 10: C.J. Herring - J. Appl. Phys., 1950, 21, no. 5, 437; Ref. 11: J.J. Weertman - J. Appl. Phys., 1955, 26, 1213; Ref. 18: F.H. Buttner, E.R. Funx, H. Udin - J. Metals, 1952, 4, 401.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Physics of Metals of the AS USSR)

SUBMITTED: March 27, 1961

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40678
S/126/62/014/CC2/C12/C13
E193/E383

AUTHORS: Pavlov, V.A., Gaydukov, M.G. and Mel'nikova, V.V.

TITLE: Dependence of the mechanism of plastic deformation in creep of Ni-Al and Ni-Co alloys on the conditions of deformation

PERIODICAL: Fizika metallov i metallovedeniye, v. 14, no. 2, 1962, 275 - 282

TEXT: In continuation of their earlier work on the mechanism of creep of Ni-Cu and Al-Mg alloys, the present authors investigated the effect of various factors on the mechanism of creep of Ni-Al and Ni-Co alloys. The Ni-Al alloys, containing up to 5% Al were chosen as one of the experimental materials because they represented alloys characterized by relatively large static lattice distortions and non-monotonic concentration-dependence of the elastic modulus. In contrast, the lattice distortions in Ni-Co alloys (with up to 60% Co) were relatively small and their elastic modulus was practically independent of the composition. The creep tests were carried out at 500 and 800 °C, the rate of

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